

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001459**Date Inspected:** 31-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

This Quality Assurance (QA) Inspector observed various fabrication and welding practices at Zhenhua Port Machinery Company (ZPMC) on Changxing Island in Shanghai, China today for the Self Anchored Suspension Bridge for San Francisco, California.

Orthotropic Bridge Girder (OBG)

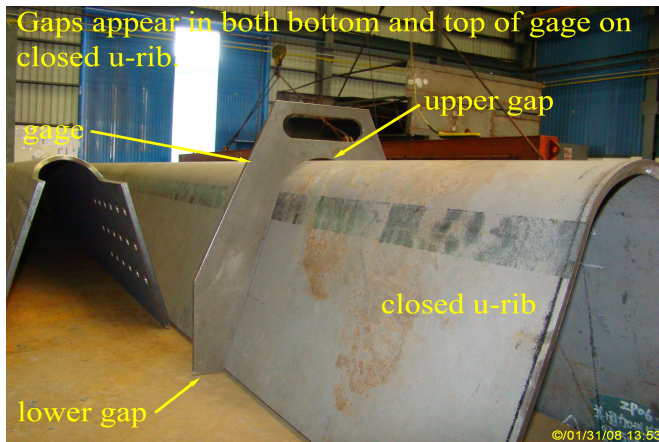
This QA Inspector observed the drilling of flange bolt holes on the flat closed u-rib plates; milling & machine beveling of flat closed u-rib plates for the partial penetration joints; the bending of closed u-rib plates; grinding a flat true edge on bottom of continuity plates which have be welded into the bent closed u-rib plates. Plate DP058 PL14B is still on table with closed u-ribs tacked in place and no further work carried out. ZPMC fabrication was practice welding with the automated welding equipment on two short closed u-rib panels. Quality Control (QC) performed magnetic particle testing on continuity plate fillet weld DP015-01-014 of closed u-rib RS1-RS1C-2 U-61. The QC performing the testing was Mr. Cai Xinxin and marked the weld as being acceptable.

This QA Inspector sample checked root land of the partial joint penetration preparations on closed u-rib member in rack on floor with an optical comparator and flashlight. Found several areas which appeared to exceed the allowance of 1.8 millimeters +/- 0.4 millimeters. The areas observed which appeared to be greater than the 2.2 millimeters allowed were noted as being as high as 2.8 millimeters. Discussions were held with Resident Level III David Mc Clary and Task-Leader Jimmy Cochran at what point we would write an Incident Report concerning the root land width. Mr. Mc Clary stated that a conversation should be held with the Lead OBG Inspector for American Bridge/Fluor (ABF) Mr. Art Peterson. Mr. Peterson stated in the conversation that if the root land width

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exceeds either the upper or lower tolerances then another welding procedure qualification would need to be run. Mr. Peterson along with ABF Inspector Warren Buehler came out on the shop floor and concurred with the QA Inspectors observations and data, however Mr. Buehler stated that ZPMC said they were as yet not completed with the weld joint preparation process. This QA Inspector asked for direction on how QA could know when the process was completed and ready for inspection. Mr. Peterson and Buehler stated that they would have ZPMC QC put a distinguishing mark showing when the process and QC inspection was completed. QA did request that enough notice be given prior to moving the parts to storage to allow for QA inspection to be carried out.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Berger, Bruce	Quality Assurance Inspector
Reviewed By:	Cochran, Jim	QA Reviewer
